## ABSTRACT

## For IP 11-031096 A

PROBLEM TO BE SOLVED: To fast store and read out data, to improve the data storage efficiency and also to minimize the occurrence of deadlocks by using a location table that manages the store blocks or an alternate key block for a random access and retrieving the location table or the key block.

SOLUTION: A location table previously calculates the necessary and sufficient number of areas based on the number of records to be stored, the block sizes and the number of primary blocks per record of the table and secures these calculated areas as a continuous area. In the same way, an alternate key block decides the size and number of blocks and secures them as a continuous area in order to store the entries for the number of records to be stored. In such a constitution where no index is used and the location table and the alternate key block are used instead, the changes due to the addition, change and deletion of data can be decreased, the processing time can be shortened and also the records can be fast stored.